ATTACHMENT J4

Elmendorf AFB Wastewater System

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J4.1 Elmendorf AFB Overview

Elmendorf AFB is located on the Knik Arm of Cook Inlet in south-central Alaska. The Base is bounded by the Municipality of Anchorage and the Fort Richardson Army reservation. The Base is situated on approximately 13,130 acres and has approximately 867 buildings. Elemendorf AFB is in Achorage County, Alaska.

Elmendorf AFB employs approximately nearly 8,000 people, including over 6,750 military and more than 1,150 civilians. The Base serves as headquarters for the Alaskan Command, the 11th Air Force, and Alaska-North American Aerospace Defense Command (NORAD) Region.

The Base's host command is the 3rd Wing. The 3rd Wing encompasses the following entities:

- 3rd Operations Group—The Group directs all operational and maintenance functions required to maintain combat readiness of air superiority and interdiction forces for the air defense of Alaska and North America. The 3rd Operations Support Squadron provides inclusive support for the maintenance of the Wing's flying mission.
- Fighter Squadrons—The 19th and 54th Fighter Squadrons maintain air sovereignty with the F-15C/D Eagle. The 90th Fighter Squadron flies long-range interdiction with F-15E Strike Eagle fighters.
- 517th Airlift Squadron—Using C-130 and C-12 aircraft, the 517th provides airlift support of airborne training for the 6th Infantry Division (Light) and the 11th Air Force.
- 962nd Airborne Air Control Squadron—The Squadron flies airborne warning and control operations missions with the E-3B Sentry, a modified Boeing 707 with a 30-foot-diameter rotodome mounted above the fuselage.
- 3rd Logistics Group—The Group provides the Wing with support in the areas of maintenance and repair, supply, transportation, and contracting.
- 3rd Support Group—The 3rd Support Group is responsible for a variety of support functions including mission support, communications, security, civil engineering, environmental management, recreation, food services, facility management, and other services.
- 3rd Medical Group—This Group provides medical, dental, and aerospace medicine support.

Elmendorf AFB also supports the following major installation tenants:

- The Alaska Command encompasses Air Force, Army, and Navy components and is responsible for the unified defense of Alaska.
- The NORAD Region provides for the defense of North America from air attack and implementation of assigned operational missions.
- The 611th Air Operations Group (AOG) and 611th Air Support Group (ASG), assigned to the 11th Air Force, provide critical air surveillance and command, control, and communications functions essential to the tactical warning and attack assessment in defense of Alaska.
- The 632nd Air Mobility Support Squadron provides en route maintenance support to strategic airlift missions and distinguished visitor aircraft transiting Alaska.
- The 381st Intelligence Squadron provides tactical support to national and theater commanders; command, control, and communications countermeasures deception training; and combat support.

Construction began on Fort Richardson (now known as Elmendorf AFB) on land set aside by Executive Order in 1929. The installation, included Elmendorf Field, which was named after Captain Hugh Elmendorf, a pilot who died in a test flight accident. Fort Richardson was renamed Elmendorf AFB in 1940. The first aircraft at the Base was the P-36 assigned to the 18th Pursuit Squadron. Elmendorf AFB served as the focal point for Alaska's defense against Japan in World War II.

Elmendorf remained prominent during the Cold War years. A large-scale construction effort replaced the War-era buildings. Aircraft were also modernized and included the P-51 Mustang, F-80s, F-84s, F-89s, F-102s, and F-4s. The Army vacated the field in 1951 for a new Fort Richardson, and the old facilities were transferred to the Air Force as Elmendorf AFB. The number of aircraft based at Elmendorf in the 1950s peaked at 200 in six squadrons. By 1960, however, only one squadron remained.

The Base resurfaced as a key installation in 1966 with the activation of the 21st Composite Wing, which later evolved to the 21st Tactical Fighter Wing in 1979, replacing the F-4s with the F-15. In 1991 the 3rd Wing replaced the 21st as the host unit.

Projected future mission requirements have necessitated the renovation or demolition of older facilities and the construction of new facilities. The Elmendorf AFB Capital Improvements Program (CIP) emphasizes consolidating existing facilities and maximizing their utilization as much as possible. Over the next 5 years, key projects planned for Elmendorf AFB, if implemented, will reduce the total square footage of buildings and facilities on Base by 2 percent.

Elmendorf AFB is also in the process of privatizing all military housing on the installation. Some area's of military housing which have all ready been privatized include Dallas, Silver Run and Chugach Housing. Chugach Housing and Sunflower Phase 1 Housing are unique at Elmendorf AFB, because these housing neighborhoods at Elmendorf AFB did not privatize the housing utilities with the housing privatization effort. The utilities for Chugach and Sunflower Phase 1 Housing are included in the Elmendorf AFB Utilities Privatization.

Future plans for Elmendorf AFB housing includes the renovation , demolition and reconstruction of current housing, as well as, the future construction of more housing for the installation.

- Elmendorf AFB has one off-installation site, Seward Recreation Camp, located near the city of Seward, Alaska. The systems being privatized at Seward Recreation Camp which are included with the Elmendorf AFB Privatization are the electric, water and wastewater systems. Seward Recreation Camp is not included with the natural gas distribution system privatization. Seward Recreation Camp is situated on land that is leased from the City of Seward, Alaska. Seward Recreation Camp is in Kenai Penisula County, Alaska.

J4.2 Wastewater System Description

J4.2.1 Wastewater System Fixed Equipment Inventory

The Elmendorf wastewater system consists of all appurtenances physically connected to the collection system from the point of demarcation defined by the Right of Way. The system may include, but is not limited to, pipelines, manholes, lift stations, valves, controls, and meters. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the system.

Specifically excluded from the wastewater system privatization are:

Elmendorf AFB

- Oil/water separators
- Grease traps
- Approximately 5,650 linear feet of collection piping owned by Anchorage Water and Wastewater Utility.
- Collection piping and appurtenances located in Privatized Housing area's at Elmendorf AFB except for Chugach and Sunflower Phase 1 Housing, as defined in the Right-of-Way.
- Six Elmendorf Base building connections which are away from the main base and are directly connected to AWWU.

Seward Recreation Camp

- Approximately 550 linear feet of collection piping at Seward Recreation Camp owned by the City of Seward.

J4.2.1.1 Description

Elmendorf AFB

Wastewater from Elmendorf AFB is discharged to the Anchorage Water and Wastewater Utility (AWWU) sewer system through three main metered stations owned by AWWU. The AWWU metered Base connections are:

- Government Hill Metering Station (Station No. 1) located near Arctic Warrior Drive on the Base southern boundary; discharges to a 24-inch AWWU main.
- Lion's Club Metering Station (Station No. 2) located near the Lion's Club, east of the Thompson Avenue and North Pine Street intersection, on the south-central boundary of the Base; discharges to a 24-inch AWWU sewer.
- Hospital Area Metering Station (Station No. 3) located on the east side of Elmendorf AFB near the Elmendorf AFB Hospital.

Metering Stations No. 1 and 2 carry the majority of the Base wastewater flow. Station No. 3 meters flow from both the Elmendorf AFB Hospital Area and Fort Richardson. The Fort Richardson lines and subsequent AWWU connection are separate from the Elmendorf AFB AWWU connection though they connect at the same station. AWWU is responsible for sewer sampling and calibrates the wastewater flow meters annually.

Six Base buildings are located away from the Base wastewater collection system and are connected directly to the AWWU sewer system. Water supply and wastewater disposal by these six facilities is less than one percent of the total Base demand.

There are no known capacity limitations in the sewer collection system and no known capacity limitations regarding planned new facilities. Infiltration and inflow to the sewers is not considered a problem by Base staff. Groundwater in the area is well below the sewer lines.

The Elmendorf AFB exterior sewer collection system lift stations are packaged stations that include a concrete wet well and prefabricated steel dry pump well with vertical waste discharge sewage pumps on rails. The packaged pump stations are complete with instrumentation and controls. Backup power is provided by Base portable generators; each lift station includes a plug-in for a generator.

The average pipe depth for wastewater collection system is 8 feet and approximately 5% of the pipe is covered by roadways or asphalt surfaces. There is no cathodic protection on the metallic piping. The HDPE wastewater collection pipe is marked with tracer wire.

Elmendorf operates under AWWU Industrial Wastewater Permit #11. The permit does not limit sewer discharge flows but is based on the wastewater generating sources and the operation and maintenance of the wastewater system. The sewer rate is set annually by contract with AWWU.

Base staff perform repair and maintenance of the wastewater utility system. Major renewal and replacement projects are performed by a contractor. Pump station wet wells are cleaned annually.

The sewer pipes were inspected with video equipment in 1999 as part of the maintenance program. Base staff routinely inspect and maintain pump stations, perform emergency repairs as needed, and perform minor renewals/replacements such as installing a new building lateral. Excavation is done by the Roadway Maintenance Shop at Elmendorf AFB. Wastewater monitoring by the Base is not required by AWWU.

Seward Recreation Camp

The system description for Seward Recreation Camp is included in section 4.9 Off-Installation sites.

J4.2.1.2 Inventory

Table 1 provides a general listing of the major wastewater system fixed assets for the Elmendorf AFB wastewater system and the Seward Recreation Camp included in the sale.

TABLE 1
Fixed Inventory
Elmendorf AFB and Seward Recreation Camp Wastewater Collection Systems

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
ELMENDORF AFB				
Concrete Pipe				
Concrete pipe	4-in	560	LF	1960
Concrete pipe	6-in	13675	LF	1960
Concrete pipe	8-in	42990	LF	1960
Concrete pipe	10-in	13070	LF	1960
Concrete pipe	12-in	9460	LF	1960
Concrete pipe	15-in	3840	LF	1960
Concrete pipe	18-in	4150	LF	1960
Concrete pipe	24-in	2420	LF	1960
Wood Pipe				
Wood Pipe	6-in	3880	LF	1950
Wood Pipe	8-in	440	LF	1950
Wood Pipe	10-in	1050	LF	1950
Wood Pipe	12-in	300	LF	1950
Wood Pipe	15-in	350	LF	1950
Vitrified Clay Pipe				

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Vitrified Clay Pipe	6-in	18000	LF	1955
Vitrified Clay Pipe	8-in	22,690	LF	1955
Vitrified Clay Pipe	10-in	4790	LF	1955
Vitrified Clay Pipe	12-in	1950	LF	1955
Vitrified Clay Pipe	15-in	1910	LF	1955
Vitrified Clay Pipe	18-in	3500	LF	1955
Vitrified Clay Pipe	24-in	12490	LF	1955
High Density Polyethylene (HDPE)				
HDPE Pipe	4-in	5920	LF	1990
HDPE Pipe	8-in	5675	LF	1990
HDPE Pipe	8-in	8525	LF	1994
HDPE Pipe	8-in	3500	LF	1995
HDPE Pipe	8-in	10360	LF	1998
HDPE Pipe	12-in	1600	LF	1994
Cast Iron Pipe				
Cast Iron Pipe	4-in	450	LF	1960
Cast Iron Pipe	6-in	220	LF	1960
Cast Iron Pipe	8-in	3940	LF	1960
Ductile Iron Pipe				
Ductile Iron Pipe	8-in	80	LF	1980
Ductile Iron Pipe	10-in	120	LF	1980
Asbestos Cement Pipe (Transite Pipe)				
Asbestos Cement Pipe	6-in	1190	LF	1960
Asbestos Cement Pipe	8-in	14320	LF	1960
Asbestos Cement Pipe	10-in	4325	LF	1960
Asbestos Cement Pipe	24-in	7285	LF	1960
Steel Pipe				

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Steel Pipe	8-in	640	LF	1980
Steel Pipe	10-in	390	LF	1980
Steel Pipe	12-in	770	LF	1980
Steel Pipe	16-in	600	LF	1980
Steel Pipe	18-in	520	LF	1980
Steel Pipe	48-in	240	LF	1980
PVC pipe (Replaced Steel pipe with PVC Pipe Bursting)	6-in	340	LF	2000
Sanitary Sewer Manhole				
Sanitary Sewer Manhole, concrete	48-in. ID	35	EA	1950
Sanitary Sewer Manhole, concrete	48-in. ID	305	EA	1955
Sanitary Sewer Manhole, concrete	48-in. ID	291	EA	1960
Sanitary Sewer Manhole, concrete	48-in. ID	102	EA	1990
Lift Station 2- Near Hanger 2, Fac. # 11525				
Pump/Lift Station (Wet Well)	Medium	1	EA	2003
Pump/Lift Station Piping and Controls	Medium	2	EA	2003
Pump/Lift Station Building (Cinderblock)	Medium	1	EA	2003
Lift Station 4-outside Fac. # 15658				
Pump/Lift Station (Wet Well)	Small	1	EA	1995
Pump/Lift Station Piping and Controls	Small	2	EA	1995
Lift Station 5- Fac. # 16710, Hanger 15				1995
Pump/Lift Station (Wet Well)	Medium	1	EA	1995
Pump/Lift Station Piping and Controls	Medium	2	EA	1995
Lift Station 6-Davis Hwy/Ship Creek, Fac. # 5327				
Pump/Lift Station (Wet Well)	Medium	1	EA	1995
Pump/Lift Station Piping and Controls	Medium	2	EA	1995

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Lift Station 7-Near Fac. # 11673				1995
Pump/Lift Station (Wet Well)	Medium	1	EA	1995
Pump/Lift Station Piping and Controls	Medium	2	EA	1995
Lift Station 8-Glacier Hall, Fac. # 7079				
Pump/Lift Station (Wet Well)	Medium	1	EA	2002
Pump/Lift Station Piping and Controls	Medium	2	EA	2002
Grinders - "Muffin Monster", in-line	4-in	2	EA	2002
Grinder Motor –1800 RPM, 230/460 V, 3-ph	3-hp	2	EA	2002
Lift Station 9-North of Fac. # 15510				
Pump/Lift Station (Wet Well)	Medium	1	EA	1995
Pump/Lift Station Piping and Controls	Medium	2	EA	1995
Lift Station 10-Mech room, Fac. # 16670				1995
Pump/Lift Station (Wet Well)	Small	1	EA	1995
Pump/Lift Station Piping and Controls	Small	2	EA	1995
Lift Station 11- North of Fac. #18220				
Pump/Lift Station (Dry Well)	Medium	1	EA	1996
Pump/Lift Station Piping and Controls	Medium	2	EA	1996
Lift Station 12- Fac. #15920				
Pump/Lift Station (Wet Well)	Small	1	EA	2002
Pump/Lift Station Piping and Controls	Small	2	EA	2002
SEWARD RECREATION CAMP				
Asbestos Cement Pipe				
Asbestos Cement Pipe	4-in.	1,345	LF	1990
Asbestos Cement Pipe	6-in.	1,245	LF	1990

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Asbestos Cement Pipe	12-in.	135	LF	1990
Cast Iron Pipe	4-in.	403	LF	1980
Sanitary Sewer Manholes	4' dia.	10	EA	1990

Notes:
EA = Each
dia. = Diameter
Fac. = Facility
HDPE = High density polyvinyl chloride
hp = horsepower
ID = inside diameter
In. = Inch
LF = Linear feet
ph = phase
PVC = Polyvinyl chloride
V = volt

The inventory of lift stations is summarized in **Table 1B-Wastewater Pump Stations**.

Table 1B

Fixed Inventory Elmendorf AFB Lift Stations

Elmendorf AFB and Seward Recreation Camp Wastewater Collection Systems

Lift Station	Size	Quantity	Unit	Year of Construction
2- Near Hanger 2, Fac. # 11525				2003
Cinderblock bldg. with Wet/drywell				
Pumps - 100 gpm net capacity	2-in	2	ea	
Motors - 3450 RPM/200 volt/12-amp, 3-phase	2-hp	2	ea	
4-outside Fac. # 15658				1995
Pumps - 50 gpm net capacity	2-in	2	ea	
Motors - 460/230 V, 3.8/7.6 Amp, 3-phase	3-hp	2	ea	
5-outside Fac. # 16710, Hanger 15				1995
Below ground wet/drywell				
Pumps - 300 gpm net capacity	4-in	2	ea	
Motors - 1750 RPM, 230/460 V, 19.8/9.9 A, 3-ph	7.5-hp	2	ea	
6-Davis Hwy/Ship Creek, Fac. # 5327				1995
Below ground wetwell				
Pumps - 300 gpm net capacity	6-in	2	ea	
Motors - 1140 RPM, 208/460 V, 15.2/7.2 A, 3-ph	5-hp	2	ea	
7-Near Fac. # 11673				1995
Wetwell, submersible pumps				
Pumps-100 gpm net capacity	2-in	2	ea	
Motors-3395 RPM, 200 V, 12 A, 3-ph	3-hp	2	ea	
8-Glacier Hall, Fac. # 7079				2002
Wet/Drywell				
Pumps-300 gpm net capacity	4-in	2	ea	
Motors- 900 RPM, 230/460 V/, 3-ph	2-hp	2	ea	
Grinders - "Muffin Monster", in-line	4-in	2	ea	
Grinder Motor -1800 RPM, 230/460 V, 3-ph	3-hp	2	ea	
9-North of JMC, Fac. # 15510				1995
wet/drywell				
Pumps-300 gpm net capacity	4-in.	2	ea	
Motors-1725 RPM, 230/460 V,8.2/4.1 /3-phA	3-hp	2	ea	
10-Mech room, Fac. # 16670				1995
Pumps- 50 gpm net capacity	2-in	2	ea	
11- North of Fac. #18220				1996
Wet/dry well, 19' deep steel drywell				
Pumps- 300 gpm net capacity	4-in.	2	ea	

Motors-1765 RPM, 230/460 V, 104/52 A, 3-ph	40-hp	2	ea	
12-at Fac. #15920				2002
wetwell, submersible pumps				
Pumps-100 gpm net capacity	3-in	2	ea	
Motors- 480 V, 3-ph	10-hp	2	ea	

Notes:
A = ampere
amp = ampere
Ea = Each
dia. = Diameter
Fac. = Facility
gpm = gallons per minute
HDPE = High density polyvinyl chloride
hp = horsepower
hz = hertz
ID = inside diameter
In. = Inch
LF = Linear feet
ph = phase
PVC = Polyvinyl chloride
RPM = revolutions per minute
V = volt

J4.2.2 Wastewater System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2
Spare Parts
Elmendorf AFB and Seward Recreation Camp Wastewater Collection Systems

Qty	Item	Make/Model	Description	Remarks
There are no spare parts with the system to be privatized.				

TABLE 3
Specialized Vehicles and Tools
Elmendorf AFB and Seward Recreation Camp Wastewater Collection Systems

Description	Quantity	Location	Maker
There are no specialized vehicles and tools with the system to be privatized.			

J4.2.3 Wastewater System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records

Elmendorf AFB and Seward Recreation Camp Wastewater Collection Systems

Qty	Item	Description	Remarks
	GIS Drawings	Sanitary Sewer System Elmendorf AFB	
	Drawings	Master Plan, Sanitary Sewer System Elmendorf AFB, Anchorage AK	Tab No. G-4
	GIS Drawings	Sanitary Sewer System Seward Recreation Camp	
	Drawings	Master Plan Seward Recreation Camp Seward, AK	
	Manuals	Sanitary Sewer System manuals located in the Mechanical Shop, Building 5327	

J4.3 Specific Service Requirements

The service requirements for the Elmendorf AFB and Seward Recreation Camp wastewater system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Elmendorf AFB wastewater system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

1. The Contractor shall provide the Contracting Officer with a copy of any and all testing information and reports related to the wastewater collection system that are submitted to any agency.
2. Contractor shall coordinate and get approval (3 WG Form 3, AF Form 103) Base Civil Engineering Work Clearance Request) from the Base before proceeding with any excavation.
3. Contractor shall be responsible for excavation/exposing wastewater line breaks near the mains to determine responsibility of repairs.
4. Contractor will make advance notification for any scheduled outages and real time notification for any unscheduled outages. For scheduled outages the Contractor shall notify all affected occupants/users, Civil Engineering and Public Affairs Office prior to proceeding.
5. Contractor shall notify the Base (Security Forces, Medical Group, Fire Dept and Civil Engineering) in advance of any road closures that will alter the base traffic flow. The contractor will be responsible for coordinating road closures with appropriate base officials such as Public Affairs to ensure the closure is publicized to the base and local populace.
6. The Contractor shall enter into a Memorandum of Understanding with the Base (Elmendorf AFB) Fire Department for fire protection of all facilities included in the

purchase of the utility. The Memorandum of Understanding shall be completed during the transition period and a copy provided to the Contracting officer.

7. The Contractor shall abide by Base (Elmendorf AFB) fire protection requirements. The utility system purchased by the Contractor includes lift stations. These lift stations may or may not include fire alarm systems. Where required by federal, state or local regulations, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.

8. The contractor shall be responsible for operating and maintaining the emergency generators and providing emergency power for the sewage lift stations during power outages and maintenance procedures on the electric system.

9. IAW Paragraph C.5.1.3, Roads are not to be cut without permission of Base Civil Engineer, Chief Engineering Division or higher.

10. The Contractor shall be responsible for obtaining/transferring any and all permits associated with the system to be privatized.

11. Contractor shall comply with Elmendorf AFB Environmental Restoration Program.

11.1 Elmendorf AFB Environmental Restoration Program (ERP). Elmendorf AFB has been listed on the National Priorities List (NPL) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. "Lessee acknowledges that Lessor has provided it with a copy, with current amendments, of the Federal Facility Agreement (FFA)", a copy of which is attached hereto and by this reference made a part hereof and labeled as **Exhibit D**, entered into by the U.S. Environmental Protection Agency (USEPA)--Region 10, the Alaska Department of Environmental Conservation (ADEC), and the Air Force and effective on September 19, 1991.

11.2 Elmendorf AFB has signed seven records of decision (RODs) at various operable units (OUs) and sites. These RODs for DP98 and OUs 1, 2, 4, 5, and 6 are legal agreements that require the management of land use controls (LUCs). LUCs are a non-engineering type of restriction that is required when contamination has been left in place and they are a component of their selected remedy in their respective RODs. LUCs range from placing limitations on types of buildings at a certain area to designating a particular area as recreational use only. Maps with approximate LUC boundaries can be provided by 3 CES/CEVR. These LUCs apply at Elmendorf AFB:

11.2.1 Basewide Groundwater - Use of the Elmendorf AFB shallow aquifer in the Outwash Plain for any purpose including, but not limited to, drinking, irrigation, fire control, dust control, or any other activity south of the Elmendorf Moraine is strictly prohibited. It is understood that portions of the shallow aquifer are contaminated and may pose a health risk.

11.2.2 Operable Unit 1 – "Restricted Use Area" designated for recreational use and construction of unmanned facilities (such as parking lots, storage buildings, etc). The construction of manned facilities (such as office buildings or residential structures) is strictly

prohibited. Excavation affecting the integrity and function of the landfill caps, or impacting the shallow groundwater table is not allowed.

11.2.3 Operable Unit 2 (ERP Site ST41)–"Restricted Use Area" designated for recreational use of the parcel (such as cross country skiing, etc) and construction of unmanned facilities (such as parking lots, storage buildings, or taxiways). The construction of manned facilities (such as office buildings or residential structures) is strictly prohibited. As long as hazardous substances remain on this site at levels that preclude unrestricted use, groundwater development and the use of the groundwater at this site for any purpose including, but not limited to, drinking, irrigation, fire control, dust control or any other activity is prohibited.

11.2.4 Operable Unit 4 (East/West)– "Airfield Use Area" designated for aircraft operations and mainenence which include active and inactive runways, taxiways, and parking aprons for aircraft. The establishment of residential development of the areas is strictly prohibited.

11.2.5 Operable Unit 6 (ERP Site LF02)– "Restricted Use Area" designated for recreational use of the parcel (such as cross-country skiing, etc.) and construction of unmanned facilities (such as parking lots, storage buildings, or taxiways). The construction of manned facilities (such as office buildings or residential structures) is strictly prohibited. As a former landfill, this designation will remain indefinitely.

11.2.6 Operable Unit 6 (ERP Site LF03) – "Restricted Use Area" designated for recreational use of the parcel (such as cross-country skiing, etc.) and construction of unmanned facilities (such as parking lots, storage buildings, or taxiways). The construction of any sort of manned facilities (such as office buildings or residential structures) is strictly prohibited. As a former landfill, this designation will remain indefinitely. This site is also permanently included in the "accident potential zone" which further restricts the construction of any above ground facilities at this location.

11.2.7 Operable Unit 6 (ERP Site LF04) – "Restricted Use Area" designated for recreational use of the parcel (such as cross-country skiing, etc.) and construction of unmanned facilities (such as parking lots, storage buildings, or taxiways). The construction of any sort of manned facilities (such as office buildings or residential structures) is strictly prohibited. As a former landfill, this designation will remain indefinitely. The use of contaminated groundwater throughout LF04 for any purpose including, but not limited to, drinking, irrigation, fire control, dust control or any other activity is prohibited. Drilling into the shallow aquifer is also restricted.

11.2.8 Operable Unit 6 (ERP Site SD15) – The use of contaminated groundwater throughout SD15 for any purpose including, but not limited to, drinking, irrigation, fire control, dust control or any other activity is prohibited.

11.2.9 Operable Unit 6 (ERP Site WP14) –The use of contaminated groundwater throughout WP14 for any purpose including, but not limited to, drinking, irrigation, fire control, dust control or any other activity is prohibited.

11.2.10 ERP Site DP98 – Excavating, digging or drilling is restricted to reduce the possibility of migration or exposure to contaminants that exceed the chemical-specific ARARs as outlined in Table 8-1 in the DP98 record of decision (ROD). If contaminated soil that exceeds residential cleanup levels is excavated, it cannot be transported to or disposed of at other location on base. No dewatering of excavations or trenches will be allowed unless contaminated water is treated prior to use or disposal. Any excavations or drilling greater than ten feet below ground surface will require special engineering controls to prevent downward migration of contamination and to protect the groundwater aquifer. The use of contaminated groundwater throughout DP98 for any purpose including, but not limited to, drinking, irrigation, fire control, dust control or any other activity is prohibited. The current land use will be maintained to reduce the possibility of exposure to contaminants.

11.3 Elmendorf AFB has implemented the following procedures for managing remedial treatment systems and LUCs:

11.3.1 The grantee must comply with the most current version of the 3rd Wing Instruction (3 WGI) 32-1007, Safeguarding Utilities from Damage. The 3 WGI 32-1007 discusses the work clearance request process, which is required for any ground disturbance of more than 4 inches on Elmendorf AFB. If the shallow groundwater aquifer is encountered during excavation, there are additional dewatering requirements, which are outlined in Section 11.3.3.

11.3.2 In areas where soil contamination is known, a work plan and sampling and analysis plan must be submitted to 3 CES/CEVR for review and approval at least 90 days prior to proposed work beginning, with at least a 45-day review time. The grantee must also have a health and safety plan prepared and on file at a known contaminated soil site prior to work beginning. Maps with approximate contaminated soil site boundaries can be provided by 3 CES/CEVR.

11.3.3 In areas where groundwater contamination is known, dewatering is prohibited without an approved (by 3 CES/CEVR) work plan and sampling and analysis plan. Both the work plan and sampling and analysis plan must be submitted to 3 CES/CEVR at least 90 days prior to proposed work beginning, with at least a 45-day review time. There are several groundwater plumes on Elmendorf AFB. Maps with approximate boundaries of groundwater plumes can be provided by 3 CES/CEVR.

11.3.4 There are remedial treatment systems (e.g. engineered wetland,high-vacuum extraction, and bioventing) in operation throughout Elmendorf AFB. Operations of these systems are required by decision documents that have been agreed upon and signed by all parties (Air Force, Environmental Protection Agency, and Alaska Department of Environmental Conservation). Some of these systems are powered by electricity, and generally, have buried electrical lines in the area. The bioventing systems also have two to three associated wells that are a part of the treatment system and are located anywhere from

5 - 30 feet from the main bioventing system. Hand digging is required within 2 feet of any system, its associated wells, or the buried electrical lines. The grantee must not disrupt these remedial treatment systems and must allow for their continued operation. If the grantee, its employees, agents or contractors damage, interrupt, or interfere with the operation of these remedial treatment systems the grantee shall immediately provide verbal notification to 3 CES/CEVR, followed up with a written notice to the Elmendorf Base Civil Engineer and a copy provided to 3 CES/CEVR. The grantee is required to pay for any damage to a treatment system and/or its associated wells. No utility lines will be placed within 10 feet of these systems or their associated wells. Maps of these systems can be provided by 3 CES/CEVR during the work clearance request review process.

11.3.5 There are over 100 groundwater monitoring wells (active/inactive and stickup/flush-mounted) located on Elmendorf AFB. The grantee will flag all wells located within 100 feet of the ROW and will take precautions to ensure wells are not destroyed or damaged. The grantee will not excavate within 5 feet of monitoring wells without prior approval from 3 CES/CEVR. The grantee will be required to repair or replace damaged monitoring wells. The grantee shall immediately notify 3 CES/CEVR of any damage to monitoring wells caused by the grantee. 3 CES/CEVR will locate wells at the grantee's request.

11.3.6 The grantee will make every effort to determine potential impacts to groundwater monitoring wells in advance of any site work. If it is determined that damage is unavoidable and it is mutually agreed with 3 CES/CEVR that a replacement well will be required, then the grantee will take the following actions:

11.3.6.1 Install replacement monitoring well(s), in accordance with ADEC regulations, at location(s) determined by 3 CES/CEVR. (This may require multiple well installations in order to get a well that can provide similar data.)

11.3.6.2 Replacement wells must be installed and sampled prior to well abandonment.

11.3.6.3 Conduct two rounds of sampling in replacement and original wells to correlate data. Sampling rounds should be three months apart.

11.3.7 The grantee will not use water from Elmendorf AFB's shallow groundwater aquifer for any purpose including, but not limited to, drinking, irrigation, fire control, dust control, or any other activity. It is understood portions of the shallow groundwater aquifer are contaminated and may pose a health risk.

11.3.7.1 The grantee will not drill through the shallow aquifer into the confined groundwater aquifer unless adequate engineering controls are used to prevent cross contamination from the shallow groundwater aquifer to the confined groundwater aquifer. All engineering controls and methods must be reviewed by 3 CES/CEVR with a minimum 30-day review time.

11.3.7.2 The grantee will not damage or interfere in any way with access to and operation of groundwater monitoring wells, remedial treatment systems and/or sampling efforts. 3

CES/CEVR and their contractors must have access, including but not limited to, vehicle access to existing monitoring wells for sampling and maintenance.

11.3.7.3 Immediately upon discovery, the grantee will provide 3 CES/CEVR with written notice of any failures to comply with these environmental land use controls.

11.3.7.4 Biennially, the grantee is required to certify compliance with LUCs by completing/signing/returning questionnaire provided by 3 CES/CEVR. Certification of compliance with LUCs can also be accomplished by grantee providing 3 CES/CEVR a signed memo of there past two years of excavating (ground disturbance of more than 4 inches) activities. 3 CES/CEVR can provide approximate LUC boundaries.

J4.4 Current Service Arrangement

Elmendorf AFB

Elmendorf AFB currently discharges wastewater to the AWWU sewer system through three main metered stations owned by AWWU. For the eleven months from July 2003 to September 2002, Elmendorf AFB discharged 636,068 thousands of gallons (kgals), with an average monthly discharge of 57,824 kgals. The monthly high during this time period was in the month of April 2003 with a discharge of 70,690 kgals, the monthly low during this time period was in the month of July 2003 with a discharge of 46,475 kgals.

Base personnel feel the sanitary wastewater system is adequate to meet current and future requirements.

Seward Recreation Camp

Seward Recreation Camp currently discharges to the City of Seward sanitary sewer system. Base personnel feel the sanitary wastewater system is adequate to meet current and future requirements.

J4.5 Secondary Metering

There are no secondary meters with the system to be privatized.

J4.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

   Name: Maintenance Engineering/3 CES

*Address:*6326 Arctic Warrior Drive, Anchorage, Alaska 99506

2. Outage Report. The Contractor's monthly outage report (blockage and overflow information) shall be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

   Name: Maintenance Engineering/3 CES
   *Address:*6326 Arctic Warrior Drive, Anchorage, Alaska 99506

J4.7 Infiltration and Inflow (I&I) Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I.

There are no infiltration and inflow projects.

J4.8 Service Area

Elmendorf AFB

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Elmendorf AFB boundaries.

Seward Recreation Camp

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Seward Recreation Camp boundaries.

J4.9 Off-Installation Sites

Seward Recreation Camp is included the sale of the Elmendorf AFB wastewater collection system as an off-installation site.

The City of Seward provides wastewater disposal service for the Seward Recreation Camp. The collection piping discharges through an unmetered connection to the city sewer system.

The camp includes cabins, recreational vehicle (RV)/trailer sites, camper/tent spaces, the Main Lodge (office, BX, snack bar, laundry), a fish-cleaning building, and several other service buildings. The camp is open from May 21 to September 7 and is occupied by up to 600 guests. The utility systems at the Camp are typically turned on in the spring and turned off, and winterized, in the fall. The sanitary wastewater systems underwent a series of major renewal and replacement projects in the 1990s when recreation facilities at the camp were modernized.

The capacity of the sanitary wastewater system at the Base is sufficient for current requirements. The sanitary wastewater system has historically provided satisfactory service, and no capacity problems have been identified. The system has the capacity to provide for future Base demands.

J4.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 5** provides a listing of service connections and disconnections required upon transfer.

TABLE 5
Service Connections and Disconnections
Elmendorf AFB and Seward Recreation Camp Wastewater Collection Systems

Location	Description
There are no service connections or disconnections with the system to be privatized.	

J4.11 Government Recognized System Deficiencies

Table 6 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Elmendorf AFB wastewater system. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects will be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 6
System Deficiencies
Elmendorf AFB and Seward Recreation Camp Wastewater Collection Systems

Project Number	Project Title	Project Description
FXSB032802	Replace Sewer Line and Manholes, Facility # 5374	Clay sewer line and manholes are old and deteriorated beyond repair. Sewer line has been patched numerous times allowing line to plug and freeze during winter months.

FXSB941006B	Sewer system repairs - Phase 2	Replace Base sewer lines, which includes excavation, pipe removal and replacement and manhole replacement, Facility #27369.
FXSB949001	Construct Sanitary Sewer Disposal Station	Construct sewage dump station. Station must have retaining wall, grates and mechanism for removing solids and retaining sand.
FXSB951019C	Replace Sewer Main - Across Base	Replace base sewer lines, which includes excavation , pipe removal and replacement, manhole removal and replacement, from Base Ops to manhole 22-15E (by Bluff Road). Approximately 15,300 linear feet of 10", 8" and 6" concrete lines.
FXSB95109C	Replace Sewer Main	Replace sewer main along Oil Well Road. Mains are 12", 14" and 16" including lining. Work includes all utilities and other necessary support.
FXSB042802	Replace Sewer Line Hanger 18.	Replace sewer line which in places is only 5 feet below the surface. This line freezes in winter.

J4.12 Right of Access to the Elmendorf AFB Utility System

Exhibit A—Map of Premises

Exhibit A map or maps from the Base Comprehensive Plan or other drawings show the known locations of the utility system and are available at the Base Civil Engineering Office. Portions of the utility system may not be fully shown on the map or maps. Any such failure to show the complete utility system on the map or maps shall not be interpreted as that part of the utility system being outside the Premises. The Premises are co-extensive with the entire linear extent of the utility system sold to Grantee, whether or not precisely shown on the map or maps.

EXHIBIT A
Wastewater System Elmendorf AFB

Qty	Item	Description	Remarks
	GIS Drawings	Sanitary Sewer System Elmendorf AFB	
	Drawings	Master Plan, Sanitary Sewer System	
		Elmendorf AFB, Anchorage AK	

EXHIBIT B—DESCRIPTION OF PREMISES

B.1. General Description of the Utility System, Lateral Extent of the Right-of-Way, and Points of Demarcation:

UTILITY SYSTEM DESCRIPTION:

The utility system may be composed of, without limitation, collection piping, manholes, final discharge meters, lift stations, treatment plants, supporting emergency generator sets (if any), and electrical controls associated with the lift stations and emergency generator sets on the Installation.

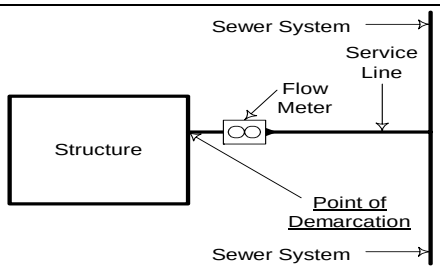
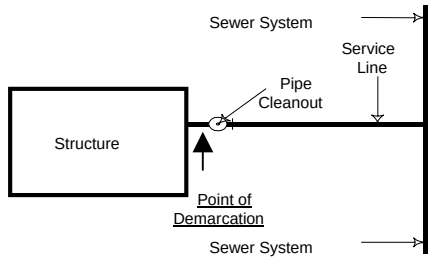
LATERAL EXTENT OF UTILITY SYSTEM RIGHT-OF-WAY:

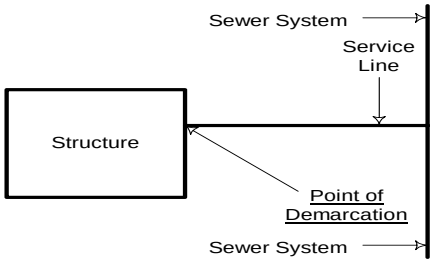
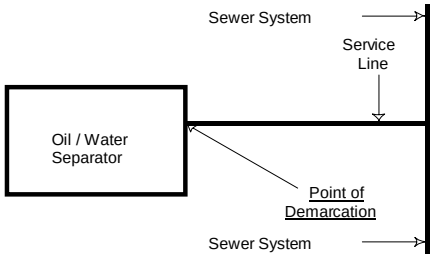
For pipe sizes of 24 inches in diameter and less, 26-feet-wide, extending 13 feet on each side of the utility system, as installed.

For pipe sizes of greater than 24 inches in diameter, 50-feet-wide, extending 25 feet on each side of the utility system, as installed.

UTILITY SYSTEM POINTS OF DEMARCATION:

The point of demarcation is defined as the point on the utility system where ownership changes from the utility system owner to the facility owner. The table below identifies the type and general location of the point of demarcation with respect to the facility for each scenario.

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is where the service line enters the structure.	Sewer system flow meter is located on the service line entering the structure.	
POD is the cleanout device, if within 10 feet of the building perimeter.	No flow meter exists and a sewer system cleanout is located within 10 feet of the building perimeter on the service line.	

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is where the service line enters the structure. Note: A new cleanout device should be installed within 10 feet of the building during any stoppage or maintenance action. This will then become the new POD.	No flow meter or cleanout exists on the service line entering the structure.	
POD is the outfall of the oil/water separator.	Any oil/water separator on the service line.	
POD is the outlet side of the Grease Trap, Oil Water Separator, or Pretreatment System.	Grease Trap, Oil Water Separator, and Pretreatment System connected to the wastewater collection system.	None
POD is at the overhead service line's connection to the service entrance mast. Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter and the can. The POD for the electric meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric utility owner's meter. The wastewater utility owner will own the service entrance mast.	Electric power is provided to a wastewater facility via an overhead service drop. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.	None

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is at the transformer secondary terminal spade. Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter. The POD for the meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric meters and transformers.	Electric power is provided to a wastewater facility via an underground service connection. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.	None

UNIQUE POINTS OF DEMARCATION:

The following table list anomalous points of demarcation that do not fit any of the scenarios shown above.

Building No.	Point of Demarcation Description
Government Hill Metering Station No. 1	The point of demarcation is the upstream side of the AWWU Meter.
Lions Club Metering Station No. 2	The point of demarcation is the upstream side of the AWWU Meter.
Hospital Metering Station No. 3	The point of demarcation is the upstream side of the AWWU Meter.

Unique Points of Demarcation between Elmendorf AFB Housing and Elmendorf AFB	
Housing Neighborhood	**Point of Demarcation Description**
Cherry Hill	The point of demarcation (POD) is at manhole (MH) 60-01, near the intersection of Arnold Ave. and Fighter Drive. Ownership does not include the manhole.
Phoenix	The POD is where the 8" Phoenix line connects to the 8" Elmendorf main on Kuter Ave., near Facility 8357.
Phoenix	The POD is where the 8" Phoenix line connects to the 8" Elmendorf main on Kuter Ave., near Facility 8317.
Denver: Facility numbers: 7385,7386, 7392,8391,8392, 8395,8396, 8399.	The POD is where the housing laterals connects to the Elmendorf main on Luke Ave. Ownership does not include the lateral.
Denver	The POD is at the connection of the 8" Denver Housing main to the Elmendorf main at MH 63-18. Ownership includes the manhole.
Denver: Facility 8428	The POD is where the housing lateral connects to the Elmendorf main on 18th street for housing Facility 8428.

Denver	The POD is at MH 64-03, near Facility 6418. Ownership includes the manhole.
FOCO	The POD is at MH 64-07, near the intersection of Arctic Warrior Drive and Pease Ave. Ownership includes the manhole.
Dayton	The POD is at MH 64-09, near the intersection of Arctic Warrior Drive and Rickenbacker Drive. Ownership includes the manhole.
GOQ and Seattle	The POD is at MH 84-13, at the intersection of 18th Street and Pease Ave. Ownership includes the manhole.
Seattle	The POD is at MH 84-08 on 18th Street, near Facility 8427. Ownership includes the manhole.
Seattle	The POD is at MH 84-19 on 18th Street, near the intersection with Pease Ave. Ownership includes the manhole.
Seattle: Other	The POD is where the housing lateral connects to the Elmendorf main. Ownership does not include the lateral.
Boston 1	The POD is where the housing lateral connects to the Elmendorf main. Ownership does not include the lateral.
Boston 2	The POD is where the housing lateral connects to the Elmendorf main. Ownership does not include the lateral.
Douglas	The POD is where the housing lateral connects to the Elmendorf main. Ownership does not include the lateral.
Boston 3	The POD is where the housing lateral connects to the Elmendorf main. Ownership does not include the lateral.
Houston: Facility numbers: 5076,5074, 5072, 5068, 5064, 4057, 4059, 5049, 5051, 5053, and 5055.	The POD is where the housing laterals connects to the 8" Elmendorf main on Blake Ave for housing facility numbers.
Houston: Facilities on Bullard Ave.	The POD is at MH 50-09 near the intersection of Bullard Ave and Arctic Warrior Drive. Ownership includes the manhole.
Housing Facilities: 3062,3058,3064, 3066	The POD is at MH 30-04 on Arctic Warrior Drive. Ownership includes the manhole.
Sunflower Phase 2	The POD is at MH 30-11E, where the 8" Boston line connects to the 24" Elmendorf main. Ownership includes the manhole.
Sunflower Phase 2	The POD is where the lateral for Housing Facility 3034 connects to the 10" Elmendorf main.
Sunflower Phase 2	The POD is where the Housing line serving Facility numbers 3020 and 3010 connects to the 10" Elmendorf main.
Sunflower Phase 2	The POD is at MH 30-21, where the 8" and 10" housing lines connect to the 10" Elmendorf main. Ownership includes the manhole. This is located near Housing Facility 3014.
Houston	The POD is at MH 30-22, where the 8" housing lines connect to the 10" Elmendorf main. Ownership includes the manhole. This is located near Housing Facility 3013.
Houston	The POD is at MH 40-16, where the 8" housing line connect to the 10" Elmendorf main. Ownership includes the manhole. This is located near Housing Facility 4051.
Houston - Facility Numbers: 4047,4045, 4041, 4039, 4037, 4150, 4144, 4138,4132 and 4126.	The POD is where the housing laterals connects to the 10" Elmendorf main on Bong Ave. Ownership does not include the lateral.
Boulder - 11 acres parcel	The POD is at MH 51-20, where the Boulder line connect to the Elmendorf main. Ownership includes the manhole.
Sunflower Phase 1	Point of demarcation is where the service line enters the structure.

New Dallas Housing	Point of demarcation is where the Housing main conects to the Elmendorf main on Fairchild Ave.
Silver Run Housing	Point of demarcation is where the Housing main conects to the Elmendorf main at the intersection of Provider Drive and Vosler Ave.
Chugach Housing	Point of demarcation is where the service line enters the structure.

MAPS OF THE PRIVATIZED HOUSING UNIQUE POINTS OF DEMARCATION :

The following Maps represent the privatized housing area distribution systems in relation to the utilities privatization distribution systems. The maps are to provide a general overview of the Housing privatization lines . Portions of the utility system may not be fully shown on the map or maps.

Attachment Wastewater Map 1.pdf
Attachment Wastewater Map 2.pdf
Attachment Wastewater Map 3.pdf

B.2. Description of Restricted Access Areas:

Description	Facility #	State Coordinates	Other Information
Lift Station No. 2	This lift station is located outside Hangar No. 2		The ROW extends 25' beyond the building/lift station perimeter walls.
Lift Station No. 4	15658		The ROW extends 25' beyond the building/lift station perimeter walls.
Lift Station No. 5	16710		The ROW extends 25' beyond the building/lift station perimeter walls.
Lift Station No. 6			The ROW extends 25' beyond the building/lift station perimeter walls.
Lift Station No. 7	11673		The ROW extends 25' beyond the building/lift station perimeter walls.
Lift Station No. 8	This lift station is located at Glacier Hall, Facility 7079		The ROW extends 25' beyond the building/lift station perimeter walls.
Lift Station No. 9	This lift station is located northwest of Facility No. 15510		The ROW extends 25' beyond the building/lift station perimeter walls.
Lift Station No. 10	This lift station is located inside Facility 11535's mechanical room. Exclusive right-of-way will not be provided for this facility; the		The ROW extends 25' beyond the building/lift station perimeter walls.

Description	Facility #	State Coordinates	Other Information
	Contractor will be granted access to this lift station.		
Lift Station No. 11	18220		The ROW extends 25' beyond the building/lift station perimeter walls.

Exhibit C—Environmental Baseline Survey

The Air Force has determined that it is not required to conduct an EBS in regard to the sale of this utility system.

Exhibit D—Elmendorf AFB Federal Facility Agreement

The Elmendorf AFB Federal Facility Agreement is hereby attached.

FFA electronic copy main.pdf

J4.13 Right of Access to the Seward Recreational Camp Utility System

Exhibit A—Map of Premises

Exhibit A map or maps from the Base Comprehensive Plan or other drawings show the known locations of the utility system and are available at the Base Civil Engineering Office. Portions of the utility system may not be fully shown on the map or maps. Any such failure to show the complete utility system on the map or maps shall not be interpreted as that part of the utility system being outside the Premises. The Premises are co-extensive with the entire linear extent of the utility system sold to Grantee, whether or not precisely shown on the map or maps.

EXHIBIT A
Drawings
Wastewater Collection Seward Recreation Camp

Qty	Item	Description	Remarks
	GIS Drawings	*Wastewater Collection System Seward Recreation Camp*	
	Drawings	Master Plan Seward Recreation Camp Seward, AK	

Exhibit B—Description of Premises

B.1. General Description of the Utility System, Lateral Extent of the Right-of-Way, and Points of Demarcation:

UTILITY SYSTEM DESCRIPTION:

The utility system may be composed of, without limitation, collection piping, manholes, final discharge meters, lift stations, treatment plants, supporting emergency generator sets (if any), and electrical controls associated with the lift stations and emergency generator sets on the Installation.

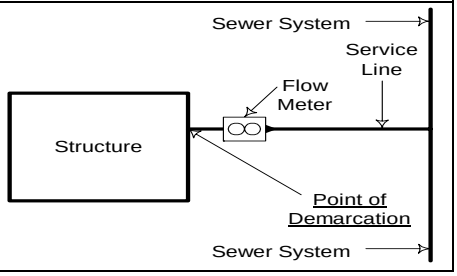
LATERAL EXTENT OF UTILITY SYSTEM RIGHT-OF-WAY:

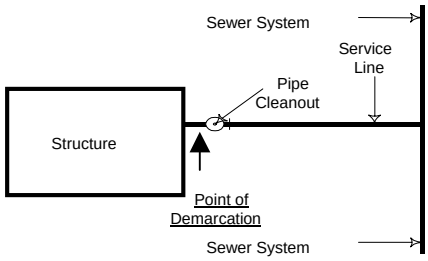
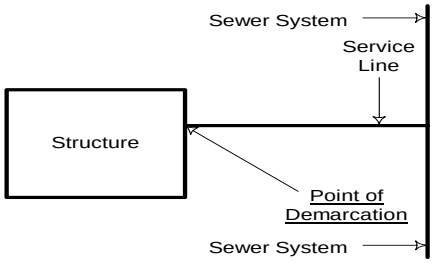
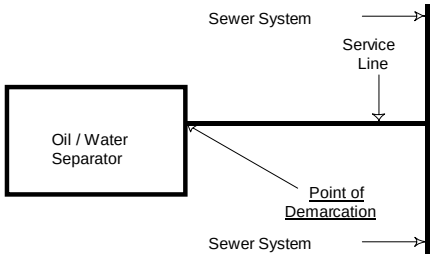
For pipe sizes of 24 inches in diameter and less, 26-feet-wide, extending 13 feet on each side of the utility system, as installed.

For pipe sizes of greater than 24 inches in diameter, 26-feet-wide, extending 13 feet on each side of the utility system, as installed.

UTILITY SYSTEM POINTS OF DEMARCATION:

The point of demarcation is defined as the point on the utility system where ownership changes from the utility system owner to the facility owner. The table below identifies the type and general location of the point of demarcation with respect to the facility for each scenario.

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is where the service line enters the structure.	Sewer system flow meter is located on the service line entering the structure.	

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is the cleanout device, if within 10 feet of the building perimeter.	No flow meter exists and a sewer system cleanout is located within 10 feet of the building perimeter on the service line.	
POD is where the service line enters the structure. Note: A new cleanout device should be installed within 10 feet of the building during any stoppage or maintenance action. This will then become the new POD.	No flow meter or cleanout exists on the service line entering the structure.	
POD is the outfall of the oil/water separator.	Any oil/water separator on the service line.	
POD is the outlet side of the Grease Trap, Oil Water Separator, or Pretreatment System.	Grease Trap, Oil Water Separator, and Pretreatment System connected to the wastewater collection system.	None
POD is at the overhead service line's connection to the service entrance mast. Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter. The POD for the electric meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric utility owner's meter. The wastewater	Electric power is provided to a wastewater facility via an overhead service drop. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.	None

Point of Demarcation (POD)	Applicable Scenario	Sketch
utility owner will own the service entrance mast, including the can.		
POD is at the transformer secondary terminal spade. Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter. The POD for the meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric meters and transformers.	Electric power is provided to a wastewater facility via an underground service connection. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.	None

UNIQUE POINTS OF DEMARCATION:

The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

Building No.	Point of Demarcation (POD) Description
City of Seward Tie-in	The point of demarcation is the point where the Air Force-owned piping discharges through an unmetered connection to the City of Seward-owned sewer system pipe. This is located near the intersection of Seward Highway and Dimond Blvd.

B.2. Description of Restricted Access Areas:

Description	Facility #	State Coordinates	Other Information
None			

Exhibit C—Environmental Baseline Survey

The Air Force has determined that it is not required to conduct an EBS in regard to the sale of this utility system.

Exhibit D—Elmendorf AFB Federal Facility Agreement

The Elmendorf AFB Federal Facility Agreement is hereby attached.

FFA electronic copy main.pdf